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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Toru Homma

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP

901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER

LIU, LIN

ART UNIT

PAPER NUMBER

2445

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,834	<b>Applicant(s)</b> HOMMA, TORU	
	<b>Examiner</b> LIN LIU	<b>Art Unit</b> 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is responsive to communications filed on 09/23/2009.

Claims 15-20 are pending and have been examined.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/23/2009 has been entered.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 20 recites the limitation "a role of a source device for the one transport channel being assigned to the **apparatus** and a role for a sink device for the one transport channel being assigned to the external device". The examiner believes Applicant intends to claim "'a role of a source device for the one transport channel being assigned to the **wireless communication device**

- and a role for a sink device for the one transport channel being assigned to the external device”
- Claim 20 recites the limitation "(c) to set a first communication condition for one-way communication in the **apparatus** and the external device, the first communication condition indicating that a first compression-encoding scheme is used in the one-way communication,”. The examiner believes Applicant intends to claim “(c) to set a first communication condition for one-way communication in the **wireless communication device** and the external device, the first communication condition indicating that a first compression-encoding scheme is used in the one-way communication,”
  - Claim 20 recites the limitation "a second transport channel transmitting content data from the external device to the wireless communication device, a role of a source device for the first transport channel being assigned to the **apparatus**,”. The examiner believes Applicant intends to claim “a second transport channel transmitting content data from the external device to the wireless communication device, a role of a source device for the first transport channel being assigned to the **wireless communication device**,”
  - Claim 20 recites the limitation "(g) to set a second communication condition for two-way communication in the **apparatus** and the external device, the second communication condition indicating that a second compression-encoding scheme is used in the two-way communication, compression-encoding content data by the second compression- encoding scheme, and”.

The examiner believes Applicant intends to claim "(g) to set a second communication condition for two-way communication in the **wireless communication device** and the external device, the second communication condition indicating that a second compression-encoding scheme is used in the two-way communication, compression-encoding content data by the second compression- encoding scheme, and".

5. Claims 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim elements:

- "means for selecting"
- "controlling means for"
- "first means for"
- "second means for"

which are means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. The specification is unclear or does not mention limitation of means plus function.

Applicant is required to:

- (a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

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- (b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

- (a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or
- (b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sim et al (PGPUB: US 2002/0002035 A1)** in view of **Kapoor et al. ("Bluetooth: Carrying Voice over ACL Links")** hereinafter **Kapoor**.

With respect to **claim 15**, Sim teaches an electronic apparatus comprising:

- a wireless communication device that executes wireless communication with an external device (Sim: fig. 2, and page 2, paragraph 32);
- an input device (Sim: pages 2-3, paragraphs 33 & 38);
- means for selecting one of a first communication mode and a second communication mode in accordance with an operation of the input device (Sim: pages 2-3, paragraphs 33 & 38, noted the SCO link and ACL link); and
- controlling means (Sim: page 3, paragraphs 38 & 41, user's selection) for controlling the wireless communication between the wireless communication device and the external device, the controlling means including:
  - first means for, when the first communication mode is selected, establishing one asynchronous connectionless (ACL) channel between the wireless communication device and the external device, setting a first communication condition for one-way communication in the apparatus and the external device, the first communication condition indicating that a first compression-encoding scheme is used in the one-way communication, compression-encoding content data by the first compression-encoding scheme, and executing the one-way communication to transmit the content data compression-encoded by the first compression-encoding scheme, from

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the wireless communication device to the external device via the one ACL channel (Sim: fig. 3, page 3, paragraphs 35, 38 & 41-44, noted that upon user's selection of listening to a MP3 file, ACL connection is established for streaming the selected MP3 file from the baseband/master to the headset/slave, with the decoder 15 in decoding high speed data e.g.: music.); and

second means for, when the second communication mode is selected, establishing **two independent channels** between the wireless communication device and the external device, the **two independent channels** including a **first channel** for transmitting content data from the wireless communication device to the external device (Sim: page 4, paragraph 48, noted the ACL link for high speed data transmission) and a **second channel** for transmitting content data from the external device to the wireless communication device (Sim: page 4, paragraph noted the SCO Link for voice communication), setting a second communication condition for two-way communication in the apparatus and the external device, the second communication condition indicating that a second compression-encoding scheme is used in the two-way communication, compression-encoding content data by the second compression-encoding scheme, and executing the two-way communication to transmit the content data compression-encoded by the second compression-encoding scheme from the wireless communication device to the external device via the first channel and receive content data compression-encoded by the second compression-encoding scheme from the external device via the second channel (Sim: page 3, paragraphs 35 & 38, and page 4, paragraphs 48-50, noted that upon user's selection of receiving an incoming call,



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SCO connection is established in transmitting low speed voice data between the baseband/master and the headset/slave, with the decoder 12 in decoding low speed data), the second compression-encoding scheme requiring a lesser amount of arithmetic operations compared to the first compression-encoding scheme (Sim: page 3, paragraphs 35 & 38).

However, Sim does not explicitly disclose establishing a second ACL channel for voice communication between a wireless communication device and an external device.

In the same field of endeavor, Kapoor teaches carrying voice communication over ACL links between a wireless communication device and a Bluetooth device (Kapoor: page 1 abstract, Introduction and page 3 section 4.2 Hardware Experiments, noted that it's been tested that it is possible to carry voice over ACL).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the voice over ACL connection as taught by Kapoor with the SCO connection of Sim in order to achieve high-quality voice (Kapoor: abstract and page 1, Intrudction).

With respect to **claim 17**, Sim teaches the electronic apparatus according to claim 15, wherein the controlling means includes means for controlling communication between the wireless communication device and the external device such that content data sampled with a first sampling frequency is transmitted from the wireless communication device to the external device when the first communication mode is selected, and content data sampled with a second sampling frequency, which is lower than the first sampling frequency, is transmitted and received between the wireless

communication device and the external device when the second communication mode is selected (Sim: page 3, paragraphs 35 & 38, and page 4, paragraphs 48-50).

With respect to **claim 18**, Sim teaches the electronic apparatus according to claim 15, wherein the external device is a headset including a speaker and a microphone (Sim: page 3, paragraph 35).

In regard to **claims 19-20**, the limitations of these claims are substantially the same as those in claim 15. Therefore the same rationale for rejecting claim 15 is used to reject claims 19-20. By this rationale **claims 19-20** are rejected.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sim et al. (Publication no.: US 2002/0002035 A1)** in view of **Kapoor et al. ("Bluetooth: Carrying Voice over ACL Links")** hereinafter **Kapoor** and further in view of **Official Notice**.

With respect to **claim 16**, Sim teaches the electronic apparatus according to claim 15, further comprising:

a display device (Sim: page 3, paragraph 44); and

displaying means for displaying a first **selection** (Sim: page 3, paragraph 41) and a second **selection** (Sim: page 4, paragraphs 48) corresponding to the first communication mode and the second communication mode, respectively, on a display screen of the display device,

wherein the selecting means includes means for selecting the first communication mode when the first **selection** is selected by an operation of the input

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device, and selecting the second communication mode when the second **selection** is selected by an operation of the input device (Sim: page 3, paragraphs 35 & 38, and page 4, paragraphs 48-50).

Sim also teaches using buttons to initiate transmission of messages to the control unit in making selections of which type of data transmission to use (Sim: page 3, paragraphs 35, 38 and 44).

However, the combined method of Sim-Kapoor does not explicitly teach a feature of displaying icons on a display screen and associating these icons with user's selections. Official Notice is taken that the feature of displaying icons and associating these icons with user's selections is well known in the art. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate such features in order to provide a friendly and visually indication of user's selection.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 15-20 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed on 09/23/2009 have been fully considered but they are not persuasive.

On page 14 of Applicant's remark, Applicant traverses the Official Notice taken by the examiner to reject claim 16. In which Applicant argues that "Applicant respectfully requests that the Examiner provide evidence to support the assertions of Official Notice

particularly with respect to claim 16. Absent appropriate evidence, a prima facie case of obviousness has not been established with respect to claim 16"

In response, the Applicant is entitled to traverse any/all Official Notice taken in this action according to MPEP §2144.03. However, MPEP §2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)."

Specifically, *In re Boon*, 169 USPQ 231, 234 states "as we held in *Alhert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or reputation of the reference cited in support of this assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed." Further note that 37 CFR §1.67(c)(3) states "Judicial notice means official notice." Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN LIU whose telephone number is (571)270-1447. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Srivastava Vivek can be reached on (571) 272-7304. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin Liu/  
Examiner, Art Unit 2445

/VIVEK SRIVASTAVA/  
Supervisory Patent Examiner, Art Unit 2445